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PATENT APPLICATION
SERIAL NO.: 08/716,169
ATTORNEY DOCKET NO.: 0470-961125

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 1644:

In re Application of

Stephen M. ANDERTON et al.

Serial No. 08/716,169:

Filed December 17, 1996:

PEPTIDE FRAGMENTS OF MICROBIAL STRESS PROTEINS AND PHARMACEUTICAL COMPOSITION MADE THEREOF FOR THE TREATMENT AND PREVENTION OF INFLAMMATORY DISEASES

Examiner Patrick J. Nolan:

DECLARATION UNDER 37 CFR § 1.132

Commissioner for Patents
Washington, D.C. 20231

I, Willem van Eden, hereby declare as follows:

1. I am one of the named inventors of the invention described and claimed in the above-captioned application.

2. I am a professor in Immunology at the University of Utrecht (the Netherlands). I have earned credentials in the area of MHC-peptide-T cell interactions and of peptide-containing pharmaceutical compositions and am recognized as an expert in the field of MHC-peptide-T cell interactions and of peptide-containing pharmaceutical compositions and their efficacy.

3. I am familiar with the subject matter of the above-identified application and claims.

4. The attached Exhibit reports, in bar graph form, the inhibition of progression of atherosclerotic lesions in mouse in comparative tests of peptides according to the present invention, as well as other materials. Two of the bars of the bar graph represent myc-HSP60 protein and pep253-268, respectively, the first being the whole HSP-protein and the second being a version of the inventive peptides. More particularly, pep253-268 is a peptide containing 7-30 amino acids having the sequence of a part of the amino acid sequence of a microbial protein having a conserved mammalian stress protein homologue, that part comprising a T cell epitope corresponding to a T cell epitope of the mammalian homologue, with the part further comprising at least 5 amino acids, which are identical with corresponding amino acids in the same relative position in a T cell epitope of the mammalian stress protein, with the epitope and the aforementioned part containing at least 4 consecutive amino acids, which are identical with the corresponding mammalian stress protein amino acids and, thereby forming said T cell epitope corresponding to a T cell epitope of a mammalian homologue.

5. The comparative study reported in the attached Exhibit was conducted, in mice, to determine inhibition of progression of atherosclerotic lesions (plaques) in mice. The data shown in the attachment establish that the inventive peptide pep253-268 was able to inhibit progression of atherosclerotic regions in mouse, in contrast to the control protein SOD and control peptide peptB23, which did not exhibit similar inhibitory activity.

6. I conclude in view of the above-summarized comparative data that the representations in the above-identified patent application, as to the efficacy of the administration of peptides containing 7-30 amino acids having the sequence of a part of the amino acid sequence of a microbial protein having a conserved mammalian stress protein homologue, that part comprising a T cell epitope corresponding to a T cell epitope of the mammalian homologue, with the part further comprising at least 5 amino acids, which are

identical with corresponding amino acids in the same relative position in a T cell epitope of the mammalian stress protein, with the epitope and the aforementioned part containing at least 4 consecutive amino acids, which are identical with the corresponding mammalian stress protein amino acids, and thereby forming said T cell epitope corresponding to a T cell epitope of a mammalian homologue, are accurate, corroborated, and described in such a way as to enable one skilled in the art to practice the invention disclosed and claimed.

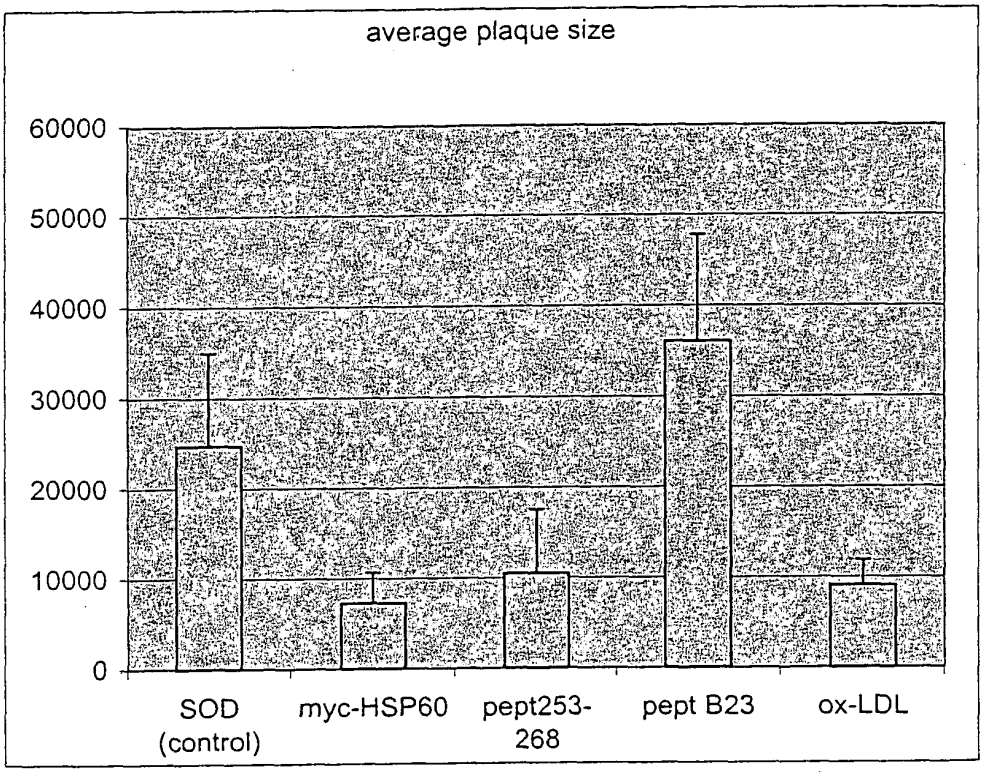
7. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Prof. W. Eden

Utrecht 11/9/2002
(date)

Inhibition of progression of atherosclerotic lesions in mouse
Anderton et al. 08/716,169

myc-HSP60 = mycobaterial hsp 60, containing peptide of the invention
pep253-268 = 15-mer peptide of the invention
peptB23 = control peptide
oxLDL = oxidized low density lipoproteins;



Exhibit